

## CLAIMS

We claim:

- 5                   1.    A method of treating a human or animal  
                  having undesirable cell proliferation comprising,  
                          administering to the human or animal a sufficient  
                  amount of a composition comprising tissue factor pathway  
                  inhibitor to inhibit the undesirable cell proliferation.
- 10                   2.    The method of Claim 1 wherein the  
                  undesirable cell proliferation is undesirable endothelial cell  
                  proliferation.
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                  undesirable cell proliferation is an angiogenesis-related  
                  disease.
- 20                   4.    The method of Claim 3, wherein the  
                  angiogenic-related disease is a disease selected from the group  
                  consisting of cancer, arthritis, macular degeneration, and  
                  diabetic retinopathy.
- 25                   5.    The method of Claim 1 wherein  
                  administration of the composition inhibits angiogenesis.
- 30                   6.    The method of Claim 1 wherein the tissue  
                  factor pathway inhibitor is a protein or peptide having the  
                  amino acid sequence set forth in SEQ ID NO. 1, a homolog  
                  thereof, or an anti-proliferative fragment thereof.
- 35                   7.    The method of Claim 6 wherein the  
                  homolog is a protein or peptide having the amino acid  
                  sequence set forth in SEQ ID NO. 2 or an anti-proliferative  
                  fragment thereof.

8. The method of Claim 6 wherein the anti-proliferative fragment contains the Kunitz-3 domain or a fragment thereof.

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9. The method of Claim 7 wherein the anti-proliferative fragment contains the Kunitz-3 domain or a fragment thereof.

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10. The method of Claim 1 wherein the composition comprises tissue factor pathway inhibitor and a pharmaceutically acceptable excipient, carrier or sustained-release matrix.

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11. A composition for inhibiting cell proliferation comprising tissue factor pathway inhibitor in a pharmaceutically acceptable carrier.

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12. The composition of Claim 11, wherein the tissue factor pathway inhibitor comprises an active fragment of tissue factor pathway inhibitor, wherein the active fragment inhibits cell proliferation.

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13. The composition of Claim 12 wherein the active fragment inhibits endothelial cell proliferation.

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14. The composition of Claim 12 wherein the active fragment inhibits angiogenesis.

15. The composition of Claim 12 wherein the active fragment inhibits angiogenesis-related disease.

16. The composition of Claim 15, wherein the angiogenic-related disease is a disease selected from the group consisting of cancer, arthritis, macular degeneration, and diabetic retinopathy.

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17. The composition of Claim 12 wherein the active fragment is a peptide having an amino acid sequence within the amino acid sequence set forth in SEQ ID NO. 1.

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18. The composition of Claim 12 wherein the active fragment is a peptide having an amino acid sequence within the amino acid sequence set forth in SEQ ID NO. 2.

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19. The composition of Claim 11 wherein the active fragment contains the Kunitz-3 domain or a fragment thereof.

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20. The composition of Claim 10, wherein the carrier is a sustained-release matrix.